

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 February 2001 (01.02.2001)

PCT

(10) International Publication Number
WO 01/07607 A2

- (51) International Patent Classification⁷: C12N 15/12, 15/11, 5/10, C07K 14/47, 16/18, C12Q 1/68
- (21) International Application Number: PCT/JP00/04895
- (22) International Filing Date: 21 July 2000 (21.07.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
11/209817 23 July 1999 (23.07.1999) JP
60/159,528 18 October 1999 (18.10.1999) US
- (71) Applicant (for all designated States except US): **HE-
LIX RESEARCH INSTITUTE [JP/JP]**; 1532-3, Yana,
Kisarazu-shi, Chiba 292-0812 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **OTA, Toshio**
[JP/JP]; 1-2-7-105, Tsujido-shinmachi, Fujisawa-shi,
Kanagawa 251-0042 (JP). **ISOGAI, Takao** [JP/JP];
511-12, Omuro, Ami-machi, Inashiki-gun, Ibaraki
300-0303 (JP). **NISHIKAWA, Tetsuo** [JP/JP]; 27-3-403,
Hikawa-cho, Itabashi-ku, Tokyo 173-0013 (JP). **KAWAI,**
Yuri [JP/JP]; 4508-19-201, Yana, Kisarazu-shi, Chiba
292-0812 (JP).
- (74) Agents: **SHIMIZU, Hatsushi et al.**; Kantetsu Tsukuba
Bldg. 6F, 1-1-1, Oroshi-machi, Tsuchiura-shi, Ibaraki 300-
0847 (JP).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— Without international search report and to be republished
upon receipt of that report.
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FULL LENGTH cDNA CLONES AND PROTEINS ENCODED THEREBY

(57) Abstract: Novel human proteins and DNAs encoding the proteins are provided. Four kinds of human proteins and full length cDNAs encoding these proteins have been isolated. The full length cDNAs of the present invention have been isolated from a cDNA library derived from progenitor cells and are used to produce these proteins.

WO 01/07607 A2